SOURCE: CERCLIS

US EPA, SUPERFUND PROGRAM LONG-TERM HUMAN HEALTH PROTECTION WORKSHEET

B568V RUN TIME: 4/29/09 4:08 PM

ine Name: MATTHIESSEN AND HEGELER ZINC COMPANY	EPA ID: IL0000064
PL Status: Currently on the Final NPL	
egron: 05 Section: SFD/RRB#1/RRS3: 090594400 Primary RPM: COLLIER, DEMAR	<u>EE</u>
E Survey Status: Insufficient Data to Determine Human Exposure Control Status	
E Estimated Control Date: 9/30/2025 LTHHP Estimated Control Date: 9/30/2025 HE Last Review Date: 5/23/	2008 RPM Certified:
ust fication Type Justification Date:	
ust fication "ext: If site status has changed, please enter a justification as to why the status has changed:	
nxhawn nustreetting ready to start the Bl (status not changed)	
efinition: The Long-Term Human Health Protection El documents the progress achieved towar unan health protection by measuring the incremental progress achieved in controlling unaccept site.	ds providing long-tern able human exposure
Step 1 Is there sufficient known and reliable information to make an evaluation on human exposure at this site?	Insufficient
Answer: No	to Determ
SDMS Number(s).	No Human Expo
L st Reference Document(s):	
372416	
· · · · · · · · · · · · · · · · · · ·	
Yes	
Step 2: Have all long-term human exposure-related cleanup goals been met for the entire site?	_
Answer:	Long-Ter
SDMS Number(s)	Yes Human He
List Reference Document(s):	Protectio Achieved
	7101110700
No	_
Step 3: Are there complete human exposure pathways between contaminated groundwater, soil surface water,	_
sediment or air media and human receptors such that exposures can be reasonably expected under current conditions?	
Answer:	
SDMS Number(s)	
List Reference Document(s):	
	_
Yes	
Step 4: Are the actual or reasonably expected human exposures associated with the complete pathways identified in Step 3 within acceptable limits under current conditions?	
Answer:	No Exposures N
SDMS Number(s)	Exposures f
L. st Reference Document(s):	ļ
(continued on next page) Yes	

(continued from previous page)		
Step 5: Is the site Construction Complete, is the remedy operating as intended, and are engineering and institutional controls (if required), in place and effective? Answer:	No	Current H Exposu Control
SDMS Number(s):		Contion
List Reference Document(s):		
	Yes	Current He Exposu Controlled Protecti Remedy in
Step 6. Are there continuing exposures at the site? Answer Yes only if EPA (or a state or PRP) has exhausted all response actions and legal authorities to prevent unacceptable human exposure, yet exposures continue due to a refusal by the property owner(s) to participate in the remedy (e.g., refusal to accept a municipal water supply hookup) AND the region wishes to exercise its discretion to classify this site as Human Exposure Under Control, consistent with the requirements laid out in the Superfund Environmental Indicators Guidance (OSWER 9285.02. March 2008, pages 4-10 and 4-11).		·
Answer:		

Exposure Pathway Description

If Human Exposure is NOT under control, please describe the exposure pathway.

Approved by Headquarters Environmental Coordinator

Unofficial

Currently, there is insufficient information to determine the site-wide Human Exposure Control status at the Matthiessen and Hegeler Zinc Company Superfund Site. The site was used for a variety of industrial activities including mining and smelting, and metals contamination of soils and nearby water bodies is expected to be the primary risk. Exposure pathways include possible trespassers on the site as well as nearby off-site residents to soil contamination, and aquatic receptors. The site is fenced except along the Vermillion River. Remedial Investigation/Feasibility Study (RI/FS) sampling began in July 2007, with a PRP conducting the work on a portion of the Site (including the Little Vermillion River) and U.S. EPA conducting the investigation on the remaining part of the Site. U.S. EPA also completed some residential soil screening around the Site for contaminants that may have migrated off-site and into residential yards. The results from this sampling event does not indicate that high levels of wide-spread contamination have migrated off-site, but supplemental sampling is needed to fill in data gaps to ensure that no areas have been missed. The full results of this residential sampling effort, along with the results from the on-site sampling and river sampling, will be used in the generation of the risk assessment report which is planned to be completed sometime in 2009.

Official

JULY 2009

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Approvals (Initial and Date)

RPM Section Chief Technical Review Branch Chief IMC Data Entry

DT 7-1-09 PLF 77/04 FMT 1/1/104

SEE PENSED PARAGRAPH.

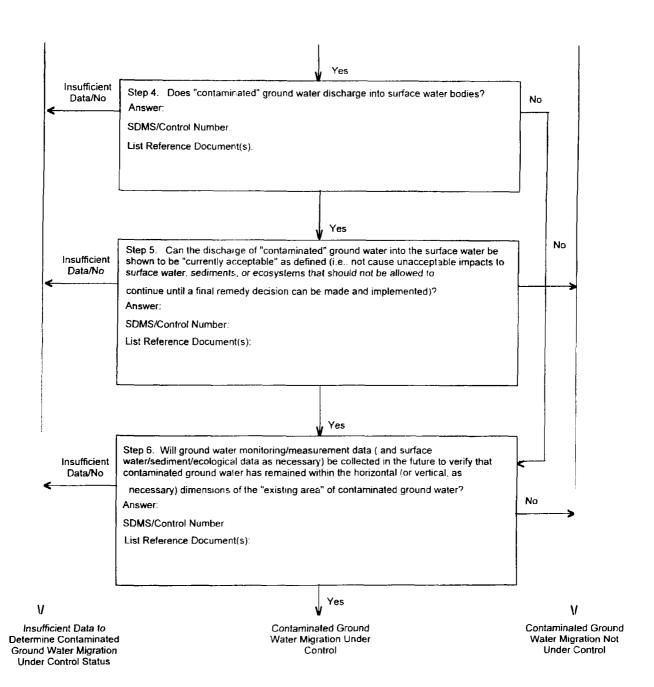
RUN DATE: 10/30/08 14:06 SOURCE: CERCLIS

Superfund Migration of Contaminated Ground Water Under Control Worksheet



Definition Is the migration of contaminated ground water being controlled through engineered or natural processes?

gion: 05	Section: Primary RPM: DEMAREE COLLIER		
e Name: MATT	HIESSEN AND HEGELER ZINC COMPANY EPA II	: IL000006	4782
/ Survey Status	Insufficient Data to Determine Contaminated Groundwater Migratic	n Control	Status
stification Date:	Justification Type:		
timated Under (Control Date: 9/30/2025		-
. 115 41 T 4.			
	If site status has changed. Please enter a justification as to why the status has changed: getting ready to start the RI.		
	<u> </u>		
		7	
	Q Does the site currently have contaminated ground water or did site conditions warrant EPA's investigation or remediation of ground water contamination in the past?	No	Stop, you do need to
	warrant EFA's investigation of remediation of ground water contamination in the past:		complete the
	Answer: Yes		311.121
	√ Yes		
	/ Step 1. Based on the most current data on the site, has all available	7	
nsufficient Data/No	relevant/significant information on known and reasonably suspected releases to ground water been considered in this determination?	-	
	Answer: Insufficient Data		
·		1	
	SDMS/Control Number: List Reference Document(s):		
	List Neterance Document(s).	ĺ	
	, Yes	_	
	Step 2. Is ground water known or reasonably suspected to be "contaminated" above	7	
1-sufficient	appropriately protective risk-based "levels" (applicable promulgated standards, as well		Contamina
Oata/No ←	as other appropriate standards, guidelines, or criteria) as a result of a release from the site?	No	Ground Wa
	Answer:	,	Migration Ur Control
	SDMS/Control Number:		
	List Reference Document(s):		
		1	
Ì]	
	y Yes		
ĺ	Step 3. Is the migration of contaminated ground water stabilized (such that]	
Irsufficient Data/No	contaminated ground water is expected to remain within "existing area of contaminated ground water") as defined by the monitoring locations designated at	No	
(the time of this determination?	 	Ì
	Answer:		
	SDMS/Control Number:		
	List Reference Document(s):		
		}	
Į			



Approvals (Initial and Date)

RPM	Section Chief	Technical Review	Branch Chief	IMC	Data Entry,
DZ 12-230	pr 1/6/09	Aux staled			31. 5/27/05

Superfund Environmental Indicators Survey Human Exposure Under Control & Groundwater Migration Under Control

Sup 1. Site Information	n		
Region:	5		
State:	16		
SPA ID:	1100	00064782	
Site Name:	Matt	niessent Hege	eler
Construction Complete:	☐ Yes	Ø′ No	
Step 2. Human Exposur	re Under Conti	rol	
to prevent any unacceptable any ironmental indicator doe	vater use condition human exposure	ns? "Under control" means the under current land- and groun	under control or below health-based levels for nat adequately protective controls are in place indwater-use conditions only. This vater use conditions nor ecological recentors.
☐ Yes			Of Instifficient Data
		Migration Under Control	CDOVICEO CONTRACTOR OF CONTRAC
/	iated groundwater		ndwater sites identified as of EOY 2000).
☑ Yes		☐ No (Go to Step 4)	ld b land by Paramakanal
processes?	nated groundwater	r from the site being controlled	through engineered remedies or natural
☐ Yes			Insufficient Data
Step 4. Regional Conta	ct Information		
Completed by:	(signature)	Level Howar	of Jon Pelia
	(print)	Linda Howard	
	(title)	EK	
	(phone)	6-0810	
	Date	7/2003	7/2/2003
·upervisor:	(signature)	Afair	Comp
	(print)	Monten J.	Marica saj
	(title)	SECTION CHIEF	2PS#Z
	(phone)	(32) 896-1842	
	Date	7/14/03	

Superfund Human Exposure Under Control Worksheet

Definition: Are all identified human exposure pathways from contamination at the site under control or below health-based levels for current land and/or groundwater use conditions? "Under control" means that adequately protective controls are in place to prevent any unacceptable human exposure under current land- and groundwater- use conditions only. This environmental indicator does not consider potential future land- or groundwater- use conditions not ecological receptors.

Region: State EPA (D:

Step 1. Based on the most current data for the site, has all available relevant/significant information of known contaminants to soil, surface water/sediments, and air at the NPL site been considered in this El determination? I xplain Rationale: List Site Reference Document: Yes Step 2. Are groundwater, soil, surface water, sediments, or air media known or reasonably suspected to be "contaminated" above appropriately protective risk-based "levels" (applicable promulgated tandards, as well as other appropriate standards, guidelines, guidence, or criteria from known contaminants? No Insu fie ent Data List Site Reference Document: Step 3. Are there complete pathways between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and ground water-use)
Explain Rationale: Many Many 1915 Explain Rationale: No Tisutficient Cata List Site Reference Document: Step 4. Are the potential exposures from Step 3 within acceptable limits under current (land and ground water use) conditions (e.g., within the cancer risk range or HI<-1)? Yes xplain Rationale: List Site Reference Document: YES, Site Does ASL FEICIENT DA Meet Definition fore Information Need Make Determinary

Superfund Migration of Contaminated Ground Water Under Control Worksheet

etanition.	Is the migration of contaminated ground water from the site being controlled through engineered or natural	processes"
Region:	5	
State		
EPA (D:	1 - 00000 4182	
Site Name		
one tame		1
No	Step 1. Based on the most current data on the site, has all available relevant/significant information on known and reasonably suspected releases to the ground water been considered in this El defermination? Explain Rationale: Property Property	
	5/	
		ł
	List Site Reference Document:	}
	Veş	_
sufficient Data	Step 2. Is ground water known or reasonably suspected to be "contaminated" above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, or enteria) as a result of a release from the site? Explair Rationale: Promote Conting, PASS	No →YES, Site I
154.5		Meet
	List Site Reference Document:	Defin
•	(▼Ycs)	=
sufficient	Step 3 Is the migration of contaminated ground water stabilized (such that contaminated ground water is expected to remain within "existing area of contaminated ground water") as defined by the monitoring locations designated at the time of this determination? Explain Rationale:	No
Datc.	List Site Reference Document:	
г	y Yes	,
	Step 4. Does "contaminated" ground water discharge into surface water bodies? Explain Rationale:	No
suffic ent		
Dats	List Site Reference Document:	
L	√Yes	i
Г	· · · · · · · · · · · · · · · · · · ·	1 1
sufficient Data	Step 5. Can the discharge of "contaminated" ground water into surface water be shown to be "currently acceptable" as defined (i.e. not cause unacceptable impacts to surface water, sediments, or ecosystems that should not be allowed to continue until a final remedy decision can be made and implemented)? Explain Rationale:	No
174(1	List Site Reference Document:	
L		
_	ΨYes	
uffic ent	Step 6. Will ground water monitoring/measurement data (and surface water/sediment/ecological data as necessary) be collected in the future to verify that contaminated ground water has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area" of contaminated ground water? Explain Rationale:	No No
		[
Data		
Data	List Sity Reference Document:	ļ
	List Site Reference Document:	
	List Site Reference Document: Yes	

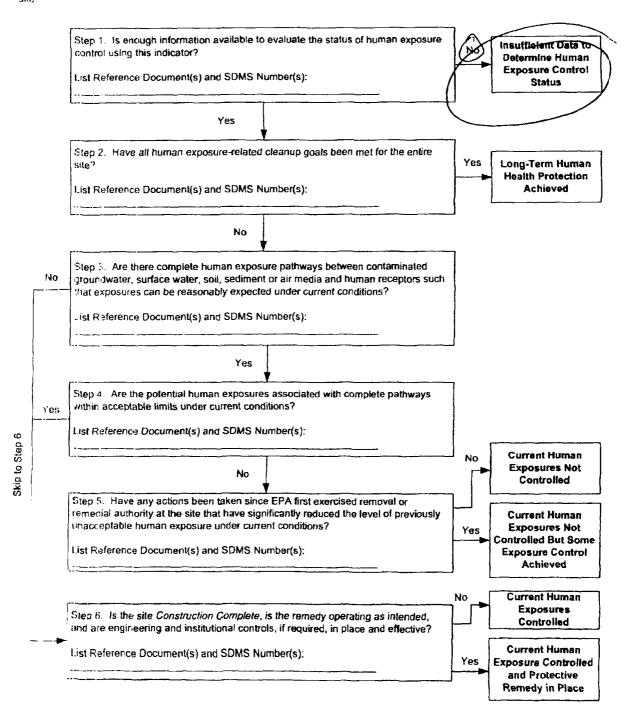
Superfund Environmental Indicators Survey Long-Term Human Health Protection & Groundwater Migration Under Control

Step 1. Site Information	l		
degion:	5		
state	14		
DPAID:	LLpa	200014782	
Site Name:	mal	thiessen + Hegeler	Zinc Co. Site
Forestruction Complete:	☐ Yes	U No	
Step 2. Long-Term Hun	nan Health	Protection	
for current land and/or group accito prevent any unacce	indwater use optable human	conditions? "Under control" mean exposure under current land- and	under control or below health-based levels s that adequately protective controls are in groundwater- use conditions only. This vater- use conditions nor ecological
In sufficien data to determin	e HE	☐ Current exposures not controlled	Current exposures not controlled but some human exposures control achieved
Current ex tosures controlled	i	Current exposures controlled and protective remedy in place	Long-term human health protection achieved
Step 3. Contaminated C	Groundwate	r Migration Under Control	
Does the site have contamin	nated groundy	vater? (In the universe of 1180 groun	dwater sites identified as of EOY 2000).
⊠ (Yes		No (Go to Step 4)	
Is the higration of contamin processes?	nated groundy	vater from the site being controlled	l through engineered remedies or natural
☐ Yes		☐ No	Insufficient Data
Step 4. Regional Conta	ct Informati	on	
Completed by:	(signature)	Dem Cell	· -
	(print)	Demarce Collie	<u> </u>
	(title)	RPM	
	(phone)	312-886-0214	
	Date	9-19-05	
Supervisor:	(signature)	Risum Frey	
	(print)	PERECCA FREY	
	(title)	Acting Section Ch	vel'
	(phone)	312-866-4760	
	Date	9/19/05	

Region:			
Str =: . L EFA D: N C DO 00 C Y 8 Sit: Name: M H 7	ne to site		
Estimated Control Date:	Unknown -	just getting rea	dy history P.I.

Superfund Long-Term Human Health Protection Worksheet

Definition: The Long-Term Human Health Protection EI documents the progress achieved towards providing long-term human health protection by measuring the incremental progress achieved in controlling unacceptable human exposures at a site.



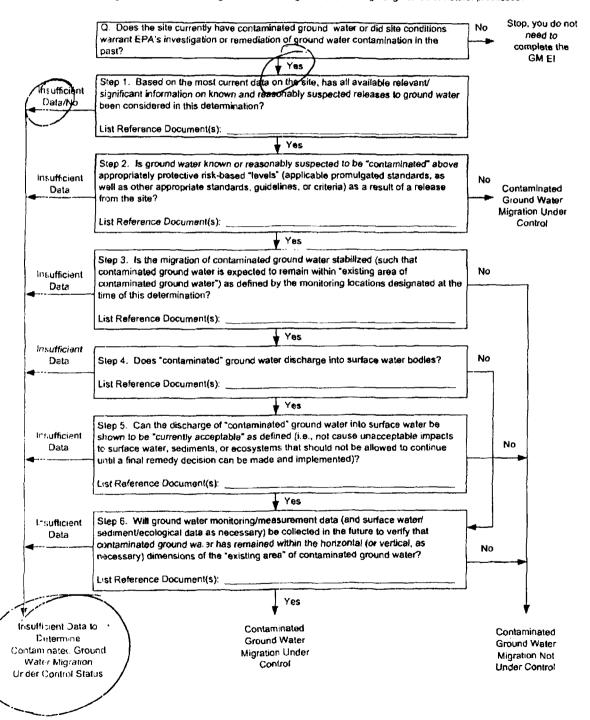
Region: 5
State: 12
EPA ID: 120000 64782
Site Name: m+H Zing (o Site

Estimited Control Date: _____ unknown - just getting ready to start RI.

ME

Superfund Migration of Contaminated Ground Water Under Control Worksheet

Definition: Is the migration of contaminated ground water being controlled through engineered or natural processes?



Superfund Migration of Contaminated Ground Water Under Control Worksheet

Definition: Is the migration of contaminated ground water being controlled through engineered or natural processes? EPAID: IL0000064782 Site Name: MATTHIESSEN AND HEGELER ZINC COMPANY GW Survey Status: Insufficient Data to Determine Contaminated Groundwater Migration Control Status Estimated Under Control Date (if not under control): 9/30/2025 Justification Text: If site status has changed. Please enter a justification as to why the status has changed: Unknown - just getting ready to start the RI. Stop, you do not Q. Does the site currently have contaminated ground water or did site conditions warrant EPA's need to investigation or remediation of ground water contamination in the past? complete the GM EL Answer: Yes Yes Step 1. Based on the most current data on the site, has all available relevant/significant Insufficient information on known and reasonably suspected releases to ground water been considered in this Data/No. determination? Answer: Insufficient Data List Reference Document(s): Yes Step 2 Is ground water known or reasonably suspected to be "contaminated" above Insufficient appropriately protective risk-based "levels" (applicable promulgated standards, as well as other Contaminated Data/No No appropriate standards, guidelines, or criteria) as a result of a release from the site? **Ground Water** Migration Under Control List Reference Document(s): Yes Step 3. Is the migration of contaminated ground water stabilized (such that contaminated ground water is expected to remain within "existing area of contaminated ground water") as Insufficient No Data/No defined by the monitoring locations designated at the time of this determination? List Reference Document(s): Yes Insufficient Step 4. Does "contaminated" ground water discharge into surface water bodies? Data/No No Answer: List Reference Document(s): Yes Step 5. Can the discharge of "contaminated" ground water into the surface water be shown to be Insufficient "currently acceptable" as defined (i.e., not cause unacceptable impacts to surface water, No Data/No sediments, or ecosystems that should not be allowed to continue until a final remedy decision can be made and implemented)? Answer: List Reference Document(s): y Yes Step 6 Will ground water monitoring/measurement data (and surface water/sediment/ecological data as necessary) be collected in the future to verify that contaminated ground water has Insufficient remained within the horizontal (or vertical, as necessary) dimensions of the "existing area" of Data/No. contaminated ground water? Answer: No List Reference Document(s): Insufficient Data to Determine Yes Contaminated Ground Ceritaminated Ground Water Contaminated Ground Water Water Migration Not Migration Under Control Status **Under Control** Migration Under Control Remedial Project Manager: DEMAREE COLLIER **Date Completed**

SOURCE: CERCLIS

US EPA, SUPERFUND PROGRAM LONG-TERM HUMAN HEALTH PROTECTION WORKSHEET

35CB

RUN TIME: 2/24/11 12:24 PM

Site Name: MATTHIESSEN AND HEGELER ZINC COMPANY	EPA ID: IL0000064782
NPL Status: Currently on the Final NPL	
Region: 05 Section: SFD/RRB#1/RRS3: 090594401 Primary RPM: COLLIER, DEMARE	E
HE Survey Status: Insufficient Data to Determine Human Exposure Control Statue NOT UNDER C	ONTROL
HE Estimated Control Date: 3/31/2011 LTHHP Estimated Control Date: 9/30/2025 HE Last Review Date: 12/20/2	2010 RPM Certified: Yes
Justification Type: Justification Date:	
Justification Text: If site status has changed, please enter a justification as to why the status has changed:	
Unknown Early stage of RI.	
Please see attached also forwarded by email	
Definition: The Long-Term Human Health Protection EI documents the progress achieved toward human health protection by measuring the incremental progress achieved in controlling unaccepta a site.	
Step 1: Is there sufficient known and reliable information to make an evaluation on human exposure at this site?	Insufficient Data
Answer: -No YES	to Determine No Human Exposure
SDMS Number(s):	Control Status
List Reference Document(s): DRAFT RI REPORT DRAFT RISK ASSESSMENT Report	
DRAFT KISK ASSESSMENT TOPS	1
	<u> </u>
Yes	
Step 2: Have all long-term human exposure-related cleanup goals been met for the entire site?	_
Answer: NO	Yes Long-Term
SDMS Number(s): List Reference Document(s):	Human Health Protection
	Achieved
Some as about	
	j
No	
Step 3: Are there complete human exposure pathways between contaminated groundwater, soil surface water, sediment, or air media and human receptors such that exposures can be reasonably expected under current conditions?]
Answer: YES	!
No SDMS Number(s):	į
List Reference Document(s):	
Same-as above	1
Yes	-
\bigvee	٦
Step 4: Are the actual or reasonably expected human exposures associated with the complete pathways identified in Step 3 within acceptable limits under current conditions?	
Answer: NO	No Current Human Exposures Not
SDMS Number(s):	Controlled
List Reference Document(s):	

√ Yes

(continued on next page)

(continued from previous page)		
Step 5: Is the site Construction Complete, is the remedy operating as intended, and are engineering and institutional		<i>*</i>
controls (if required), in place and effective?		Current Huma
Answer:	No	Exposures
SDMS Number(s):		Controlled
List Reference Document(s):		
	Yes .	Current Humar Exposure
		Controlled and
		Protective Remedy in Plac
Step 6: Are there continuing exposures at the site? Answer Yes only if EPA (or a state or PRP) has exhausted all response actions and legal authorities to prevent unacceptable human exposure, yet exposures continue due to a refusal by the property owner(s) to participate in the remedy (e.g., refusal to accept a municipal water supply hookup) AND the region wishes to exercise its discretion to classify this site as Human Exposure Under Control, consistent with the requirements laid out in the Superfund Environmental Indicators Guidance (OSWER 9285.02, March 2008, pages 4-10 and 4-11).		
Answer:		
Exposure Pathway Description If Human Exposure is NOT under control, please describe the exposure pathway.	-	
· · · · · · · · · · · · · · · · · · ·	_	
Approved by Headquarters Environmental Coordinator Unofficial		
Superfund Site. The site was used for a variety of industrial activities including mining and smelting. Metals contar nearby water bodies is expected to be the primary risk. Exposure pathways include possible trespassers on the site off-site residents, who may be exposed to soil contamination. The site is fenced except along the Vermillion River. Investigation/Feasibility Study (RI/FS) sampling began in July 2007, with a PRP conducting the work on a portion of Little Vermillion River) and U.S. EPA conducting the investigation on the remaining part of the Site. U.S. EPA also cresidential soil screening around the Site for contaminants that may have migrated off-site and into residential yards.	e as well as Remedial the Site (in ompleted s	cluding the
gap sampling efforts in the residential area were conducted in 2009 and early 2010 to conclude the final field work a have shown relatively low tevels of metals contamination in the residential area. Once the risk assessment is finaliz sufficient information to make some conclusions regarding the human exposure control status at the site.	t the site. I	nitial results
See attachel		
Official		
There is insufficient information to determine the site-wide Human Exposure Control status at the Matthiessen and I Superfund Site. The site was used for a variety of industrial activities including mining and smelting. Metals contar nearby water bodies is expected to be the primary risk. Exposure pathways include possible trespassers on the site off-site residents, who may be exposed to soil contamination. The site is fenced except along the Vermillion River. Investigation/Feasibility Study (RI/FS) sampling began in July 2007, with a PRP conducting the work on a portion of Little Vermillion River) and U.S. EPA conducting the investigation on the remaining part of the Site. U.S. EPA also c residential soil screening around the Site for contaminants that may have migrated off-site and into residential yard gap sampling efforts in the residential area were conducted in 2009 and early 2010 to conclude the final field work a have shown relatively low levels of metals contamination in the residential area. Once the risk assessment is finaliz sufficient information to make some conclusions regarding the human exposure control status at the site.	mination of e as well as Remedial the Site (in completed s s. Two foll t the site. I	soils and senearby cluding the come ow-up data nitial results
See attached		
See Williams		
Approvals (Initial and Date)		

RPM

Section Chief

Technical Review

Data Entry

IMC

Branch Chief